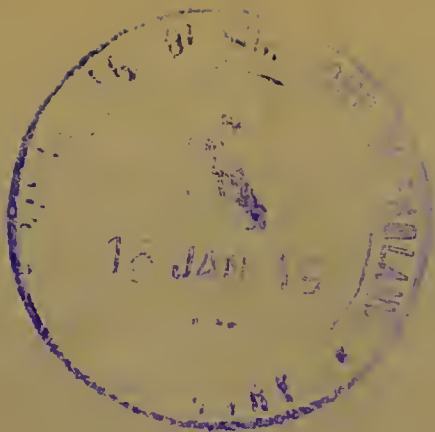




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CLINICAL INSTRUCTION;

ITS REAL IMPORT AND ITS METHOD.

BEING AN INTRODUCTORY LECTURE TO A COURSE OF CLINICAL
MEDICINE, 1877-78.

A FEW days ago I had occasion to discuss, elsewhere, the relation of lectures in general, and lectures on the Practice of Medicine in particular, to books on the one hand, and to practical or clinical instruction on the other. I now propose to take up more in detail the questions proper to this course viz.—What is Clinical Instruction? how does it stand related to Clinical Lectures? and how ought it to be conducted so as to utilise to the utmost the practical opportunities, alike for teaching and for learning, belonging to the medical service of an hospital like the Western Infirmary? The few introductory remarks I shall make to you on these topics will not, I trust, invade too much the actual work to be performed in this course; and they will give me an opportunity of stating, once for all, the results of an experience acquired during more than twenty years of service as an hospital physician, and as a clinical teacher.

I. *What is Clinical Instruction?*—Clinical instruction is, as its very name implies, *bedside* instruction. The very idea of clinical instruction, properly so-called, carries with it that both instructor and instructed are to be in presence of the patient, and learning the lessons of disease together from the absolute source of all real and final knowledge in respect to disease—the *sick man*. The lessons of a private practitioner to his apprentices, in the days when apprenticeships still existed, were true clinical instruction, and, with such a man as Abercrombie, who practised this method exclusively, they must have been clinical instruction of the best and highest kind. A well-conducted dispensary, in which the physicians not only see their patients at the hospital, but follow them up at their own homes, and along with their pupils, is also a very fruitful and admirable field for true clinical instruction, and one which only requires competent and devoted men to make it at least equal, if not superior, to any other. Strange to say, however, neither of these are counted as formal clinical instruction in your curriculum of study. Probably the difficulty of securing adequate regularity of attendance, and a sufficient body of well-trained and thoroughly competent teachers, may be the reason why every kind of medical attendance upon the sick poor has not been more or less formally utilised for this purpose. But having for several years pursued this method, in connection with the Royal Public Dispensary of Edinburgh, where I had usually classes varying from half-a-dozen to twenty pupils, and having

given the hours of many a long afternoon to conferences with some of these, in almost all the "closes" between Holyrood and the West Port, on the cases of disease which were too urgent to be visited otherwise than at home, while others were seen at the Dispensary on two fixed days in the week, I am in a position to affirm that it is quite possible, and would be, I think, very desirable for you, that more should be made of this form of clinical instruction than has hitherto been done in Glasgow. Here, however, I am restrained by the consideration that I am not likely to be able to work in this direction myself; and I can only, therefore, commend to the junior physicians and surgeons of this hospital, and of the Royal Infirmary, the plan of clinical instruction to which I refer, of which the German *Poli-klinik*, or *clinique of the town*, is one of the numerous modifications. One thing, indeed, is necessary to prevent this mode of instruction from becoming a mere sham and an abuse of the name of clinical teaching, viz.—a proper sub-division of the work; and, as arising from this, a sufficient amount of time given to it. Hurry-scurrying through thirty or forty cases in an hour, as is done in the out-practice of many hospitals, is not instruction, but the reverse; or, if instruction at all, it is simply instruction in bad habits—absolutely fatal habits—of inaccuracy and want of thought. It is painful to me to be led even to allude to this subject; for it is not alone the injury done to the sick poor, in many cases, but the still greater, because persistent and absolutely irremediable, injury done to the medical art

and to the students and junior practitioners of it, by the system of hasty consultations involved in the vast and quite over-grown out-practice of many hospitals in London and elsewhere, that demands a word of stern and sad remark. What is to become of young men trained in such habits, in after life, if at the very outset of their career it is made plain to them by the bad example of their seniors, that five minutes, or three minutes, or two minutes, perchance, is all that can be spared for the investigation of a case of serious internal disease with a view to its treatment? if, moreover, this rapid and unexact frame of mind is identified in the imagination of the junior with something that is called "practical," which may be roughly defined as the faculty of transacting the greatest possible amount of "business"—*i.e.*, making the greatest number of blind guesses, and writing the greatest number of brainless prescriptions, in the shortest possible lapse of time? I believe, speaking as a man who knows what medical consultations are, and what amount of time and care they really require, that no more ruinous lesson could possibly be taught at the outset, than this; and, on the other hand, that nothing is more absolutely essential for true clinical instruction than an abundance of time, so that every case that is made the subject of remark at all, shall be, as nearly as possible, completely investigated according to all the lights that can be brought to bear upon it alike from ancient experience and from modern science. And this is perhaps the one difficulty in realising true clinical instruction of the best kind, as a rule, otherwise than in hospital wards. Young prac-

tioners are too inexperienced, old practitioners are too busy, to give it in a really profitable manner, from the ever-increasing and over-abounding stores of general and miscellaneous practice. "While the grass grows, the steed starves;" while the multitude of cases is being thus over-hastily seen, the mind of the pupil, far from being enriched thereby with really valuable experience, is *sterilised*, so to speak, by acquiring the fatal habit of passing diseases under review superficially, and without anything like due investigation; so that he becomes, in the end, like the veriest empiric, a mere man of routine; with this difference, and one not always in his favour, that he has been during his pupilage artificially fed and nursed, so to speak, on books and lectures, and finally exalted, by the possession of a degree or diploma, into the conceit of himself that he is competent to know and to treat all manner of diseases—the fact being that he has not learned even the very elements of a true *diagnosis*.

2. *Importance of a Right Method.*—Clinical instruction, then, is, as we have said, bedside instruction; but it is, or ought to be, such bedside instruction only as is methodically conducted, and rendered, as nearly as may be, complete. And, if you will think of it for a moment, the *method* of the instruction is to you quite as important as even the facts, or substance of the instruction. For it is but little profitable to you to see a patient lying in a bed, and to hear *me* pronounce it a case of pneumonia, or of Bright's disease; what is wanted is that *you* should be able to see why and how this conclusion is arrived at. And in the order of

importance to you, the “how” is first, the “why” second; because the personal realisation of the facts, the investigation of the phenomena, to speak in scientific phrase, should precede, and not succeed, the formation of an opinion about them. Hence it is scarcely clinical instruction at all, in the proper and just meaning of the word, for a physician merely to lecture about a case, and to tell you in detail his opinion about it. What is really wanted is that he should place you, or at least some of you, and as many as possible of you, in the position to form your own opinion about it—guiding you, of course, by his more matured opinion, but only so as to show you the way, and prevent you from making mistakes. Nay, even your mistakes are capable of being turned to account in a system of true clinical instruction; the mistake of one man is often the best kind of instruction for the many. And I would most seriously exhort you in all cases to be prepared to take this view of mistakes, not to laugh at them, or to scorn them, in each other, but to study them as the true path to knowledge; the practical exhibition of the fallacies and difficulties which will beset you all in your way through life. You will therefore greatly assist each other, and me as your instructor, if you frankly submit yourselves to questioning on all facts emerging at the bedside; for it is only by the answers of the individual man that I can discover the needs of the whole class; and only through your failures as individuals that the standard of knowledge and practical efficiency can be raised for the whole. You will very soon arrive, indeed, at this belief

for yourselves, if you will only take note that we never reprove or deride any one on account of a mistake, but always use it as the means of discovering how far a difference of opinion is legitimate, and how far it is shared by others, or how far it may be removed by new observations; and in carrying out this plan at the bedside, you will also observe that I prefer to throw my own opinion into the common stock, as it were, and to submit it to the criticism of facts, like the others, rather than to impose it upon you as final under almost any circumstances.

3. *Clinical Lectures; their place in a course of clinical instruction.*—You will observe that I have said little hitherto about *Clinical Lectures*, except by an allusion, perhaps, to show their inadequacy as a means of clinical instruction; and it seems, therefore, rather incongruous to have to remark, at this point, that it is *only* the clinical lectures that are, generally speaking, recognised in your curriculum; in other words, the real essence of clinical instruction, that without which it is not *clinical* at all, is passed *sub silentio*, or altogether neglected and omitted. This is certainly not as it ought to be, and I trust that in any future regulations of the authorities, or discussions in the Medical Council, this view of the question of clinical instruction will receive due consideration. As matters stand at present, the clinical or practical department of your instruction is, just as much as any other, open to the charge of being overmuch dependent upon lectures; and it is far less excusably so dependent, inasmuch as it is this part of your medical instruction that

might be expected to be the corrective of any excess of lectures elsewhere. But, not to prolong remarks upon a topic that is not for you but for your seniors to judge of, I will hasten to add that there are serious practical difficulties in the way of securing the regular attendance of many students in the wards, to the extent that might harmonise thoroughly with the idea of an absolutely clinical or bedside instruction, in the strictest sense of the word. My own interpretation of the formal and official requirement is simply that by "lectures" is meant a stated meeting with the whole class, checked by roll-call; whether the instruction be given in a separate lecture-room, or in the ward. While, therefore, we aim at fulfilling the regulations which require two "lectures" to be given in the week, we do not rest upon that regulation, or adopt the ordinary method of simply *lecturing about* cases instead of actually *examining* cases of disease, as the basis of our clinical method. At one of the two "lectures," accordingly, which occur statedly as part of the weekly programme, I assemble the class in the large lecture-room, as assigned to me by the Managers, viz., on Tuesdays; at the other, on Thursdays, I arrange to have a regular meeting in the ward,¹ equally subject to roll-call,

¹ These Thursday meetings or lectures are now (1889) usually held in a smaller lecture-room on the same floor with the wards, to which, therefore, patients can be transferred without almost any appreciable disturbance. And with the help of two clinical assistants, Drs. Middleton and Hawthorne, I am able so to arrange the work done in the wards on other days so that on each day of the week there is a definite and usually a prearranged demonstration open to the whole class or to sections of

and with every possible arrangement made for your physical comfort, as well as for bedside instruction, such as can from its nature be appreciated by a considerable number. But whatever be the form of the assemblage, the lecture (so-called) is simply the condensed and ordered expression, or the interpretation, of observations made, and of facts elicited in your presence in the wards; the lecture, therefore, is in all cases most profitable to those who have taken some pains otherwise to know personally the facts. I cannot refrain from adding here that I have listened to clinical lectures both at home and abroad, which were in no respect clinical in any true sense of the word. One distinguished professor in Paris, during my visits to his hospital, was giving a whole series of clinical lectures on the properties, physiological and pathological relations, and therapeutic uses of arsenic. I could only wonder if he was also getting up his materials as he went along by giving arsenic all round to all his patients. Another professor in Germany, on one occasion when I was casually present, had been giving two whole days (and two hours each day) in succession, to a complete systematic exposition of the entire subject of hemiplegia and the allied forms of paralysis, as illustrated clinically by one case only; and the worst of it was, that this was really a clinical lecture in external appear-

it, of which a daily register is kept. On Mondays, Dr. Middleton conducts a regular course of instruction throughout the session, in microscopical and chemical investigations, which, though allied to clinical studies, can be better taught methodically than at the bedside.

ance at least; for the unhappy patient was present throughout this remorselessly long-winded harangue, and was doomed to listen from his bed (hauled into the lecture-theatre) to a statement at full length of the nature of the disease, causes, predisposing and exciting, pathological anatomy, symptoms, diagnosis, prognosis, and treatment, without even one word, so far as I observed, of kindly sympathy or consideration for *him*, any more than if he had been an inanimate object. This was the most cold-blooded exhibition I ever saw or heard of, in the shape of a clinical lecture; and, notwithstanding the great reputation of the professor, and my anxiety on other grounds to follow him, I was so unfavourably impressed, that I never again ventured within that professor's lecture-room.

4. *Physician and Patient. The Ethics of a clinical course.*—This leads me to make another remark about the proper conduct of a course of clinical instruction. Bedside teaching is not what it professes to be—viz., clinical in the highest sense, unless, besides being a discipline for you in regard to the facts of disease and the methods of observing them, it is also made an equally careful training in respect of the moral relation between physician and patient. I will confess to you at once that there is some risk of this aspect of the matter being forgotten at times, and I am by no means one of those who maintain the absolute compatibility, under all circumstances, of the interest of the patient with that of the clinically-instructed pupil. There is a risk, as I have already said, that clinical instruction may be conducted in a cold-

blooded and heartless manner, to the detriment of the patient. But on the other hand I fully believe, and indeed know from experience, that the sick poor derive, on the whole, a literally immense amount of benefit which would otherwise not accrue to them, from the thoroughly methodised, ordered, and elaborate investigation which their cases undergo as a consequence of clinical instruction. Comparing, as I am able to do every day, the diagnosis and even the treatment of disease in hospital patients, with what is the average lot of the same class of patients out of hospital; nay, even comparing the indoor hospital patient, the subject of clinical instruction, with the wealthy man or woman moving in society, who consults the most fashionable physicians, and has his or her family doctor always at hand, I am almost sure that the balance of advantage is often on the side of the hospital patient; and this, just because of the thoroughness of investigation, and the methodical care in regard to all details of treatment and nursing, which obtain in a well-regulated hospital ward. But I would not have you suppose that these advantages of our clinical method can be secured to the patients, say of the Western Infirmary, without your co-operation; without the whole scope of our clinical teaching, being such as engages, both in your case and mine, the heart as well as the head. I will utter no mere vague sentimentalisms on this subject, for it is one where an honest, but not overstrained, humane sympathy with suffering humanity is all that is required to guide you aright. What is necessary, however, is that you should

clearly realise to yourselves the position; that if I, for example, forget for one moment, or if you allow or oblige me to forget for one moment, the real interests of the patient as they appear to a kindly sympathetic physician, it is not only an injury done to the sick man, but also a violation of the law of true clinical instruction. For what I have got to teach you, and what you have got to learn, at the bedside, is nothing less than the whole art of the physician; and this includes, most assuredly, as one of its most important elements, the art of securing the confidence and goodwill of the patient.

5. *Details of Clinical Work.*—Now to apply the remarks regarding clinical instruction to our own work in detail. We require, in the first place, a group of clinical clerks, and these we shall select, to the requisite number, from among yourselves. To these gentlemen will be committed the keeping of the ward journals, in a great measure; with the proviso, however, that in most cases either my assistant and *chef-de-clinique* (as the French say), or the resident physician, or I, shall have revised and critically compared the record with the facts of the case, before it is finally inscribed. In this critical comparison there will necessarily arise most valuable material for bedside instruction; therefore the examination of the details of the clinical record will usually, or as much as possible, take place in presence, not indeed of the whole clinical class, but of a select number. Use these opportunities well, gentlemen, for they are invaluable. The record, in its completed form, will be, it is to be hoped, a record of

facts ; but even facts are often tinged, or modified by opinion ; and where reasonable differences of opinion arise, we shall be careful not to extinguish these, but to preserve them in the form of the record itself ; which will in all cases be authenticated by the name of the reporter, and often of those also who have concurred with, or differed from, him in his statement of particular facts. In all cases, moreover, we require the *date* of the observation, and as much as is convenient, the order in which the facts are elicited, to appear upon the face of the record. We allow no subsequent correction or revision of this (saving for plainly clerical errors) except in the form of a marginal or foot-note, similarly dated ; and for this purpose we keep, purposely, a blank page open opposite every written page of our hospital report. Some of the most instructive of our bedside conferences have arisen upon these late verifications, or corrections, of doubtful points in the original record of a case. When, in the course of an ordinary ward visit, I personally dictate the report of a first or of any future observation, it is similarly authenticated, and equally open, as in the case of the report of a junior, to future criticism or correction ; and many of you can bear me witness that I never hesitate in allowing an error, or a doubtful expression, to be fully and deliberately discussed, and the correction, if necessary, duly inscribed as such, upon the margin. Indeed it is in these very difficulties and fallacies of observation that we frequently find the best materials for our clinical lectures. Finally, after a certain period of observation, and after a certain number of presum-

ably exact details have been inscribed, we make upon the first blank page opposite the beginning of the case, a connected and reasoned *Summary* of the whole observations, which in many cases, but not always, includes also a definite diagnosis, or at least the materials of one. On a second blank page we inscribe a connected statement of the details of treatment ; on a third, the whole series, or a carefully-constructed abstract, of temperature observations ; on a fourth, urinary observations, &c., &c. Diagrams of physical diagnosis, sphygmograms, &c., are inserted as required in the journals ; and thus after a while there is built up gradually a completed record of the case, up to the moment of dismissal from the hospital, or of death.

6. *Verification of Details.*—Such are our hospital journals, the raw material, so to speak, of our clinical lectures and instructions. It is clearly and manifestly impossible that all the members of a clinical class shall be even present, much less participate in the observation and verification of each individual fact ; but our aim is so to work *together* in all things, and so to record the results of our work, that every member of the class shall feel, as it were, with the force of personal conviction, that the statements so recorded are such as he *might* possibly have verified, had he happened to be present at the time. And not unfrequently, the actual verification takes place, in the case of unusual, or striking, or typical phenomena which from their nature can be submitted to larger numbers, before these larger numbers, or even before the entire class, on one or other of the lecture days

above mentioned. But obviously, such verifications or conjoint observations, must be of a very select kind; for with every increase in the number of observers it is absolutely necessary to diminish the area, so to speak, of the facts observed. Thus it is possible, without fatigue or risk, to demonstrate the more glaring râles over a single point of the lung surface, or a well-marked cardiac bruit, or an irregularity in the pupils, or a well-defined percussion-dulness or tumour, to a large number comparatively; but if, as is usually the case, the more critical investigation of any of these requires more than the mere statement of the fact—if the murmur has to be traced to its source, or studied as to its law of diffusion; if the râles have to be followed out with relation to their distribution, or associated with other facts, such as the alterations of the respiratory murmur in different parts of the chest, then the bare physical possibilities of personal verification by numbers become correspondingly restricted. Hence in our more numerous assemblages, whether on days subject to roll-call or not, we find it often necessary to elect two or at most three representative men out of the class, to whom, in detail, the more difficult or complicated observations are committed, and their impressions, told singly and in presence of the whole class, are discussed, controverted, verified or rejected, as the basis of direct observation on which the diagnosis is to proceed, or the principles of treatment are to be brought into question. And here, also, we use the hospital record as supplementary to direct or personal observation; always with the understanding that the hospital

record itself has been the result of previous observations made and controlled, as far as possible, by like methods of verification in detail.

7. *How Clinical Lectures are Composed.*—Lastly, the clinical *lecture* proper, *i.e.*, apart from the ward altogether, to the whole class assembled in the lecture-room, is no ambitious performance, nor display of learning or of eloquence on the part of the lecturer, but simply, as far as possible, an outgrowth from the labours of the preceding week, or month, or more, as the case may be, of duty in the wards. Facts and phenomena, previously observed separately, are here discussed in correlation; cases which have terminated or passed out of view, are treated in *résumé*, and the most obvious conclusions arising out of them as to treatment, or prognosis, or pathology—such inferences, in short, as would have been out of place in the wards, are shortly indicated. And considering that we have already, in this Western Infirmary and these wards of ours during only three years, since 1874, accumulated some hundreds of cases, and almost a score of [now (1889) nearly ninety] volumes of records, compiled throughout with the same anxious care for the verification of every detail, we sometimes seek back, as it were, upon our own previous clinical experience, partially remembered, it may be, by the seniors among you, or at least open to your inspection and comparison in detail with the cases more immediately before us. Sometimes, but more rarely, we pass beyond the bounds of what may be called our conjoint experience in this hospital, and supplement it

by more general statements founded on a wider area of observation.

Such, gentlemen, is our clinical method, briefly, but I hope comprehensively, stated. You will observe at once that it is widely different from that ascribed by rumour to an old friend of mine, who still lives, but who has survived all his ambitions, and will, I am sure, pardon me the use of this illustration. I happened to attend, long ago, the earlier part of the first course of clinical lectures delivered by this gentleman, and I was struck by the remarkably complete and exhaustive manner in which each whole subject was brought into view upon the basis, usually of a single case in the wards, which was simply read to us out of the journal by way of introduction, or text, so to speak. The current rumour was that the course of lectures in question had been elaborated in the course of the preceding summer, being written down every word in an exactly ordered fashion, according to all the respected author's previous experience and reading; so that the cases, as they occurred, were fitted into the lectures, instead of the lecture being adapted to the cases. It was a well-marked example of the method called by the logicians *ὑστερον πρότερον*. But I am often reminded of this way of clinical lecturing by the reports I read in the medical journals, of dissertations, often by very able men, and therefore well worth reading, on subjects requiring both elaborate treatment and complex illustration, far beyond the scope of individual experience and especially of hospital experience; which nevertheless seem to have been delivered, for some

reason hard to be understood, under the title of clinical lectures. Of such dissertations we may say, almost as the French Marshal said of the Balaclava charge—"C'est magnifique ; mais ce n'est pas la guerre ;"—they may be admirable in their way, but they are not clinical. In this hospital I hope you will find throughout, even now, a rigidly clinical system of instruction, thoroughly worked out by each physician and surgeon. It is within my hopes and aspirations, that as its wards are extended, as its resources are developed, and as its out-practice is made even more available for your instruction than now, it may become a great co-operative institute of clinical teaching, in all respects commensurate with the wants of this great medical school.



